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NOTES ON GEOGRAPHIC DISTRIBUTION

Aves, Emberizidae, *Coryphospingus pileatus* (Wied, 1821): a new gathered bird species to São Paulo state and evidences of southern geographic expansion in Brazil

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ABSTRACT: The Pileated Finch *Coryphospingus pileatus* has an extensive geographic range that encompasses northeast to central, east and part of southeastern regions in Brazil. In southeastern region, Rio de Janeiro and Minas Gerais states were treated as southern limit of the species distribution. In the present note, we firstly documented the species to São Paulo state, extending to southern its old-believed geographic distribution. We argued several records of *C. pileatus* in Vale do Paraíba region since 40 years ago. We also hypothesized the future geographic expansion of the species in São Paulo state.

The Pileated Finch *Coryphospingus pileatus* (Wied, 1821) is a small (13 cm) passerine that inhabit arid scrub and edges of woodlands from 0 to 1,600 m of altitude in the north of Venezuela, most of north Colombia and French Guiana and an extensive area from northeast to central, east and part of southeastern regions in Brazil (Stotz *et al*. 1996; Sick 1997; Ridgely and Tudor 2009). Despite the inexistence of global species estimates, *C. pileatus* is considered common to fairly common on its broad 2,760,000 km^2 geographical range estimate (Stotz *et al*. 1996; BirdLife International 2010).

In Brazil, the Rio de Janeiro and Minas Gerais states are treated as the austral limit in the occurrence of *C. pileatus* (Sick 1997; Ridgely and Tudor 2009). Pacheco *et al.* (1997) retracted the record of this species mentioned by A.P. Leão in the municipality of Piraí (22°37' S, 48°54' W), on south of Rio de Janeiro. Despite it, a non-published record at the municipality of Rio Claro, 22°43' S, 44°86' W; (J.F. Pacheco, unpub. data) reveals that the species occurs in southernmost areas of this state at least since 1960s. In southern Minas Gerais, the occurrence of *C. pileatus* is notorious, and some species records extend from Guaxupé (21°19' S, 46°40' W; J.F. Pacheco and D. Pioli, unpub. data), Alfenas (21°25' S, 45°56' W; Pacheco and Bauer 2003), Varginha region (21°3' S, 45°30' W; Lopes 2006), Baependi (21°57' S, 44°53' W; Pinto 1952), Aiuruoca (22°06' S, 44°41' W; Vasconcelos 2008), and Maria da Fé (22°17' S, 45°23' W; Pinto 1944).

In the present note, we firstly documented the species to São Paulo state. On 16 December 1990, J.F. Pacheco and P.S. Fonseca recorded a pair of this species in Bananal municipality (22°40' S, 44°19' W), nearest to the border with Rio de Janeiro state. Recently, on 11 September 2009, C. Cestari observed a male moving through a transitional vegetation among secondary native Atlantic forest mixed with non native *Eucalyptus* spp. in Jambeiro municipality (23°16' S, 45°45' W, Figure 1). As far as we know, this is the southernmost geographic species record. Jambeiro is located on Vale do Paraíba region, nearly 100 km straight line from the last southernmost point of the species recorded by J.F. Pacheco in Rio Claro municipality, Rio de Janeiro state. Concerning our records, we further discovered more recent non published records of this species concentrated on Vale do Paraíba region through an online database of Brazilian bird photos (WikiAves 2010). These records encompassed four more municipalities: Monte Alegre do Sul, São José dos Campos, São Luís do Paraitinga, Santo Antônio do Pinhal (Figure 2), and Taubaté. Additionally, there are records of *C. pileatus* on Vale do Paraíba municipalities of Caçapava, Pindamonhangaba and Taubaté, over 40 years-old, gathered from an experienced ornithologist of the region (H.M.F. Alvarenga, personal communication, Figure 1). We believe that the records mentioned above were from wild birds, but we do not discard the possibility that some individuals escaped from captivity or were apprehended by government authorities and released in the region in consequence of illegal pet trade.

All the cited records of *C. pileatus* in Vale do Paraíba reflect the lack of published studies on the presence of

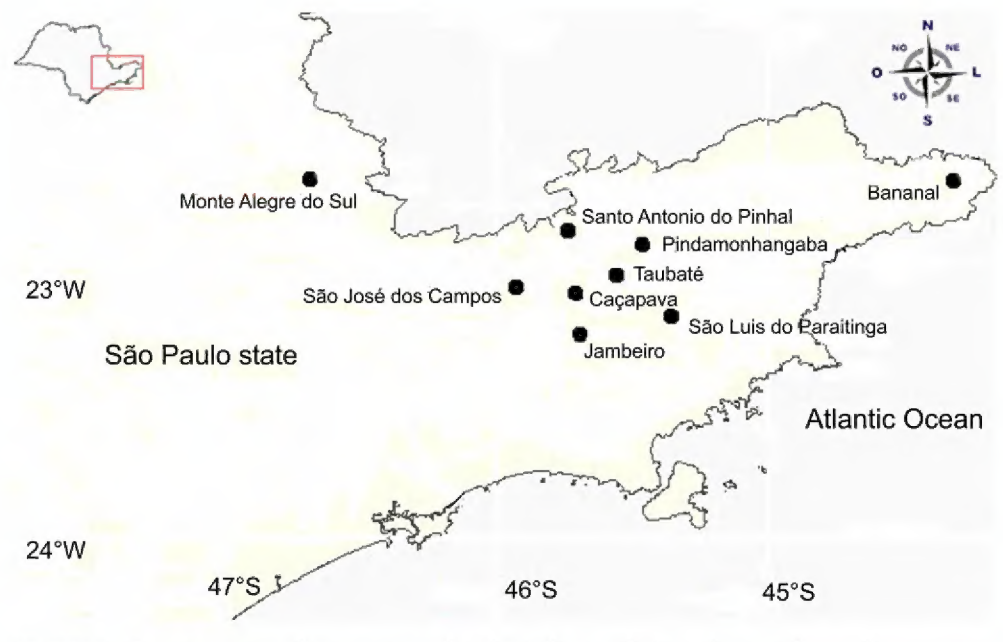

FIGURE 1. Municipalities in which Pileated Finches (*Coryphospingus pileatus*) were recorded in São Paulo state, Brazil.

the species in the region. Furthermore, these data may indicate a southern geographic range expansion to São Paulo state that possibly started in the 1970s. Probably, historical human activity such agriculture, cattle ranching and deforestation on Vale do Paraíba (Dean 1996) created suitable open and arid habitats to the species. Currently, the species is recorded in abandoned farms, coffee plantations, and arid habitats (H.M.F. Alvarenga, personal communication).

Figure 1. Male of Pileated Finch (*Coryphospingus pileatus*) photografed by Rafael Fortes on 02 October 2009 in Santo Antônio do Pinhal, São Paulo state, Brazil.

There are other examples of other species such as *Patagioenas picazuro* (Temminck, 1813), *Fluvicola nengeta* (Linnaeus, 1766), *Furnarius figulus* (Lichtenstein, 1823) and *Netta erythrophthalma* (Wied, 1832) which had southern range expansions and were primarily observed in the northeast region of São Paulo state (Alvarenga 1990; Willis 1991; Alvarenga *et al.* 2006). Nowadays, some of these species (*P. picazuro* and *F. nengeta*) are widespread in this state, and anthropogenic impacts derived by agriculture and deforestation were pointed as main causes for bird species expansions (Willis and Oniki 1987; Willis 1991). In the case of *C. pileatus*, additional records will probably help to reveal the main causes of the species presence or future geographic expansion in São Paulo state.

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